## CLAIMS

I claim:

1. A corneal implant for correcting hyperopia, comprising:

(a) a body formed of an optically clear, biocompatible, material having an index of refraction substantially the same as that of corneal tissue;

(b) the body being solid and having two surfaces that are bi-meniscus in shape and joining each other at the periphery of the lens;

(c) the thickness of the edge being less than about 15 micrometers.

2. The implant of claim 1, wherein the body is generally circular in shape.

3. The implant of claim 1, wherein the body is of a size greater than the size of the pupil in normal or bright light.

4. The implant of claim 1, wherein the index of refraction is in the range of 1.36 to 1.39.

5. The implant of claim 1, wherein the body is about 4.5 mm in diameter.

6. The implant of claim 1, wherein the center of the body is no greater than 50 micrometers thick.

7. The implant of claim 1, wherein the biocompatible, material is a microporous hydrogel.

8. The implant of claim 7, wherein the microporous hydrogel has a water content greater than 40% up to approximately 90%.

9. The implant of claim 7, wherein the microporous hydrogel has passageways to permit nutrient and fluid transfer, said passageways being small enough to act as a barrier against tissue in growth.

10. The implant of claim 7, wherein the microporous hydrogel is made from at least one hydrophilic monomer which is polymerized and cross-linked with at least one multi- or di-olefinic cross-linking agent.

11. A method of implanting a corneal implant for correcting hyoperia, comprising the steps of:

(a) cutting away a portion of the outer surface of a cornea;

(b) implanting a lens on the exposed surface of the cornea with a body formed of an optically clear, biocompatible, material having an index of refraction substantially the same as that of corneal tissue, the body being solid and having two surfaces that are bi-meniscus in shape and joining each other at the periphery of the lens, the thickness of the edge being less than about 15 micrometers; and

(c) replacing the portion of the cornea that was cut away.

12. The method of claim 11, wherein the index of refraction is in the range of 1.36 to 1.39.

13. The method of claim 11, wherein the body is generally circular in shape.

14. The method of claim 11, wherein the biocompatible, material is a microporous hydrogel.

15. The method of claim 14, wherein the microporous hydrogel has a water content greater than 40% up to approximately 90%.

16. The method of claim 14, wherein the microporous hydrogel has passageways to permit nutrient and fluid transfer, said passageways being small enough to act as a barrier against tissue in growth.

17. The method of claim 14, wherein the microporous hydrogel is made from at least one hydrophilic monomer which is polymerized and cross-linked with at least one multi- or di-olefinic cross-linking agent.